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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,874	09/23/1999	FERDINAND ENGEL	00124/024001	5265

7590 12/03/2002

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EXAMINER
LE, DIEU MINH T

ART UNIT	PAPER NUMBER
2184	

DATE MAILED: 12/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/401,874	ENGEL, FERDINAND	
	Examiner	Art Unit	
	Dieu-Minh Le	2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Part III DETAILED ACTION

Specification

1. Claims 1-31 are presented for examination.

2. This office Action is in response to the RCE filed 10/23/02.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carusone, Jr. et al. (US Patent 5,157,667

hereafter referred to as Carusone) in view of Reynolds et al. (US Patent 6,138,161 hereafter referred to as Reynolds).

As per claims 1-2:

Carusone substantially teaches the invention. Carusone teaches:

- a method of **troubleshooting (i.e., failure detection, identifying failure location, perform failure analysis, isolating failure, failure reporting capabilities)** a network [abstract, fig. 1, col. 1, lines 10-14];

- attempting communication with a plurality of device [fig. 1, col. 6, lines 40-45];

- if the attempt to communication with failed device, determining if a device has an active neighbor [abstract, col. 5, line 8-37 and col. 8, lines 61-68];

- if it is determined that the device has an active neighbor, identifying the device as a failed device [col. 6, lines 11-25 and col. 9, lines 8-40];

- a method is implemented by a computer on the network (i.e, a connectivity among host processor or host computer connected via a network of switches as illustrated in fig. 1, col. 7, lines 8-56].

Carusone does not explicitly teach:

- a device as a target device.

However, Carusone does disclose capability of:

- a central service processor (i.e., target device) within a networking switching environment [col. 9, lines 33-64];

- central reporting location for linking networking devices or units [col. 16, lines 60-67].

In addition, Reynolds discloses capabilities of:

- communication network comprising router as target device [abstract, col. 4, lines 45-62];

- communication between the target device and the initiator via a network to eliminating the loss of data or failure [col. 4, lines 35-44].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made *first* to realize the Carusone's method and apparatus for performing fault isolation and failure analysis in a switching networking environment having capabilities of neighboring devices data analysis, and devices failure detection, more specifically, central service processor, as being the target

device within a network as claimed by Applicant. This is because the Carusone's device failure detection, isolation, and analysis within a networking system would have included such target device (i.e., central service processor) since the target device or central service processor is used as a base target or element to engineering and determining the cause of network failure; *second*, one would modify the Caursone's performing fault isolation and failure analysis to explicitly including the target device with capability of eliminating the failure or data loss as taught by Reynolds in supporting the networking operation system environment.

As per claims 3-4:

Carusone substantially teaches the invention. Carusone teaches:

- a method of **troubleshooting (i.e., failure detection, identifying failure location, perform failure analysis, isolating failure, failure reporting capabilities)** a network [abstract, fig. 1, col. 1, lines 10-14];

- attempting communication with a device [col. 6, lines 40-45];

- if attempt to communication with identified neighbor is successful, concluding that the identified neighbor is

active [abstract, col. 5, line 8-37 and col. 8, lines 61-68];

- identifying an active neighbor devices[col. 6, lines 11-25 and col. 9, lines 8-40].

Carusone does not explicitly teach:

- a device as a target device.

However, Carusone does disclose capability of:

- a central service processor (i.e., target device) within a networking switching environment [col. 9, lines 33-64];

- central reporting location for linking networking devices or units [col. 16, lines 60-67].

In addition, Reynolds discloses capabilities of:

- communication network comprising router as target device [abstract, col. 4, lines 45-62];

- communication between the target device and the initiator via a network to eliminating the loss of data or failure [col. 4, lines 35-44].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made

first to realize the Carusone's method and apparatus for performing fault isolation and failure analysis in a switching networking environment having capabilities of neighboring devices data analysis, and devices failure detection, more specifically, central service processor as being the target device within a network as claimed by Applicant. This is because the Carusone's device failure detection, isolation, and analysis within a networking system would have included such target device (i.e., central service processor) since the target device or central service processor is used as a base target or element to engineering and determining the cause of network failure; *second,* one would modify the Caursone's performing fault isolation and failure analysis to explicitly including the target device with capability of eliminating the failure or data loss as taught by Reynolds in supporting the networking operation system environment.

As per claims 5-7:

Carusone substantially teaches the invention. Carusone teaches:

- a method of **troubleshooting (i.e., failure detection, identifying failure location, perform failure analysis,**

isolating failure, failure reporting capabilities) a network [abstract, fig. 1, col. 1, lines 10-14];

- a central service processor (i.e., target device) within a networking switching environment [col. 9, lines 33-64];

- a neighboring table for the network [col. 12, lines 9-25];

- consulting the neighboring table to [col. 9, lines 13-40].

Even though, Carusone does not explicitly teach capability of: - polling target device.

However, Carusone does disclose capability of:

- a timing mechanism used for isolating failure [col. 10, lines 55-64];

- a timer-based mechanism for precisely isolating a fault [col. 4, lines 61-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to realize the Carusone's method and apparatus for performing fault isolation and failure analysis in a switching networking environment having capability timing mechanism used for

precisely isolating a fault as being polling target device as claimed by Applicant. This is because the Carusone's isolating fault timing mechanism used for device failure detection, isolation, and analysis within a networking system would have included such device polling function since this polling capability is operated based on a timing manner. It is further obvious because this polling capability is notoriously well known in the art of computing arena. For example, Desnoyer et al. (U.S. patent 5,923,840) explicitly disclosure the periodically polling of device to determine active device within a computer networking environment.

As per claims 8-9:

Carusone substantially teaches the invention. Carusone teaches:

- a method of **troubleshooting (i.e., failure detection, identifying failure location, perform failure analysis, isolating failure, failure reporting capabilities)** a network [abstract, fig. 1, col. 1, lines 10-14];
- a central service processor (i.e., target device) within a networking switching environment [col. 9, lines 33-64];
- a neighboring table for the network [col. 12, lines 9-25];

- consulting the neighboring table [col. 9, lines 13-40];

- table contains Network information (i.e., management information base, MIB) [col. 12, lines 9-25].

As per claim 10:

Carusone substantially teaches the invention. Carusone teaches:

- a method of identifying a failed device in a network [abstract, fig. 1, col. 1, lines 10-14];

- switches [col. 8, line 49];

- processors [col. 8, line 53];

- control units [col. 8, lines 48].

As per claim 11:

Carusone substantially teaches the invention. Carusone teaches:

- a method of **troubleshooting (i.e., failure detection, identifying failure location, perform failure analysis, isolating failure, failure reporting capabilities)** a network including a plurality of devices (i.e, a connectivity among host processor or host computer connected via a network of switches as illustrated in fig.

1, col. 7, lines 8-56]) [abstract, fig. 1, col. 1, lines 10-14];

- receiving information from plurality of devices [fig. 2, col. 4, line 66 through col. 5, line 37];

- generating a neighbor table for the network (table contains Network information (i.e., management information base, MIB) [col. 12, lines 9-25];

- attempting communication with a plurality of device [fig. 1, col. 6, lines 40-45];

- attempting to communication with device to determining a device is an active [abstract, col. 5, line 8-37 and col. 8, lines 61-68];

- if device is not active using the neighbor table to identifying a neighbor of device (i.e., it is determined that the device has an active neighbor, identifying the device as a failed device) [col. 6, lines 11-25 and col. 9, lines 8-40];

Carusone does not explicitly teach:

- a device as a target device.

However, Carusone does disclose capability of:

- a central service processor (i.e., target device) within a networking switching environment [col. 9, lines 33-64];

- central reporting location for linking networking devices or units [col. 16, lines 60-67].

In addition, Reynolds discloses capabilities of:

- communication network comprising router as target device [abstract, col. 4, lines 45-62];

- communication between the target device and the initiator via a network to eliminating the loss of data or failure [col. 4, lines 35-44].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made *first* to realize the Carusone's method and apparatus for performing fault isolation and failure analysis in a switching networking environment having capabilities of neighboring devices data analysis, and devices failure detection, more specifically, central service processor, as being the target device within a network as claimed by Applicant. This is because the Carusone's device failure detection, isolation, and analysis within a networking system would have included such target device (i.e., central service processor) since the target device

or central service processor is used as a base target or element to engineering and determining the cause of network failure; *second*, one would modify the Caursone's performing fault isolation and failure analysis to explicitly including the target device with capability of eliminating the failure or data loss as taught by Reynolds in supporting the networking operation system environment.

As per claims 12-20:

Due to the similarity of claims 12-20 to claims 1-10 except for an apparatus for identifying a failed device in a network instead of a method for identifying a failed device in a network; therefore, these claims are also rejected under the same rationale applied against claims 1-10. In addition, all of the limitations have been noted in the rejection as per claims 1-10.

As per claims 21-29:

These claims are the same as per claims 1-10 and 12-20. The only minor different is that this claim is directed to a computer program stored on a computer readable medium to identifying a failed device in a network instead of the method and apparatus for identifying a failed device in a network as

described in 1-10 and 12-20, respectively. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realized that a machine-readable storage medium is a necessary item for such networking system, more specifically, data communication or transmission among computer devices. Since the networking system obviously needs a means for instruction or code means resided within the machine-readable storage medium for performing the data storing, receiving, transmitting operation capability. Therefore, this claim is also rejected under the same rationale applied against claims 1-10 and 12-20.

As per claims 30-31:

These claims are similar to claims 1-10. therefore, these claims are also rejected under the same rationale applied against claims 1-10. In addition, all of the limitations have been noted in the rejection as per claims 1-10.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

3. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703) 305-9408. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can be reached on (703)305-9713. The fax phone number for this Group is (703)746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2184

DML
12/2/02